

Appl. No. 10/632,513
Response Dated July 7, 2005
Reply to Office action dated June 10, 2005

Amendments to the Specification

Please replace paragraph [0061] with the following amended paragraph:

[0061] Referring to FIG. 14, two drive motors 332 are positioned within the housing 334. The motors 332 are controlled by a control device including a microcontroller 344 mounted on a printed circuit board 346. Wires 348 electrically connect the control device to the motors 332. The control device is also equipped with input/output ports 350 mounted on the circuit board 346. The cover 342 can include openings 354 (see FIGS. 9 and 10) for providing ready access to the input/output ports 350 even when the cover is secured to the top and bottom walls 338, 340 of the housing 334. As described in U.S. application Ser. No. [[10/_____,]] 10/632,672, having attorney Docket No. H0005322, entitled "Bi-Directional Connections for Daisy-Chained Dampers" and filed on a date concurrent herewith, the ports 350 can be used to couple the control device to a main controller, and/or to daisy chain multiple damper units together. The above-identified application is hereby incorporated by reference in its entirety.

Please replace paragraph [0065] with the following amended paragraph:

[0065] In a preferred embodiment, the drive motors 332 are configured as described in U.S. application Serial No. [[10/_____,]] 10/632,669, having attorney Docket No. H0005324, entitled "Damper Including a Stepper Motor" and filed on a date concurrent herewith. The above-identified application is hereby incorporated by reference in its entirety.

Please replace paragraph [0074] with the following amended paragraph:

[0074] Referring now to FIGS. 15, 16A and 18, the drive shafts 360 of the drive motors 332 also include second ends 360b that project outwardly from the casings 359 into the housing 334. A rotational position indicator 370 (i.e., a flag) is mounted to the second end 360b. The indicators 370 project perpendicularly outwardly from the shafts 360 and rotate in concert with the shafts 360. As best shown in FIG. 18, portions of each of the motors 332 are positioned beneath the circuit board 346 (i.e., portions of the circuit board 346 cover or overlap the motors 332). With the circuit board 346 so positioned, the rotational position indicators 370 pass beneath the circuit board 346 with each revolution of their corresponding shafts 360. Sensing devices 380 are preferably positioned on the side of the circuit board 346 that faces the motors 332. The sensing devices 380 are adapted to detect each time the rotational position indicators 370 pass by the sensors. In one embodiment, the sensing devices 380 include Hall Effect sensors, and the rotational position indicators 370 include magnets capable of being sensed by the Hall Effect sensors. In other embodiments, the sensor can include an optical sensor, a proximity sensor, or any number of different types of sensors. As described in U.S. application Ser. No. [[10/_____,]] 10/633,333, having attorney Docket No. H0005339, entitled "Self-Adjusting System for a Damper", [[and]] filed on a date concurrent herewith, now U.S. Patent No. 6,880,799, issued April 19, 2005, the sensing devices 380 and indicators 370 provide data regarding the rotational positions of the vanes which is used by the control device to reset or calibrate the step counts of the motors. The above-identified application is hereby incorporated by reference in its entirety.